CLEANUP

NASNI SITE 10 RE-CONSTRUCTION

LEAD ACTIVITY
Naval Air Station North Island (NAS North Island)

STATUS
Active

MISSION
To reduce the potential human health risks associated with metals in the Shoreline Slag Area, which adjoins the shipping channel of San Diego Bay on the northwest portion of NAS North Island, as well as to reduce the potential for the metals to have adverse effects on groundwater and the San Diego Bay.

REQUIREMENT
The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the National Oil and Hazardous Substances Contingency Plan (NCP) (Title 40, Code of Federal Regulations [CFR], Part 300), and the California Health and Safety Code (CA-HSC) Subsection 25323 define the requirements for the Site 10 removal actions. These regulations define removal actions as the cleanup or removal of released hazardous substances, actions that monitor the threat of release of hazardous substances, and actions that mitigate or prevent damage to public health or welfare and the environment.

An engineering evaluation/cost analysis (EE/CA) was performed in accordance with current U.S. Environmental Protection Agency (EPA) and U.S. Department of the Navy (DON) guidance documents for a non-time-critical removal action (NTCRA) to characterize the site, identify removal action objectives, describe removal action alternatives, present an analysis of the alternatives, and describe the recommended removal action alternative.

DESCRIPTION
At installation restoration (IR) Site 10 on Naval Air Station (NAS) North Island, San Diego, a smelter was used from 1943 to 1967 for salvage operations to recover metals from scrap aircraft parts. Slag, a waste product of the smelting operation, was disposed of at a bluff adjoining the shoreline of San Diego Bay, in the area now known as the IR Site 10 Shoreline Slag Area. The slag wastes contain small, randomly located fragments of low-level radioactive material (i.e., point sources) and elevated concentrations of lead, copper, and other metals and have been identified as posing a potential human health risk.

Military salvage operations began at a 10-acre site on the northwest shoreline of NAS North Island in the early 1930s (Bechtel, 1997) and subsequently expanded into the present-day DRMO. The smelter was used from 1943 to 1967 for salvage operations to recover metals from scrap aircraft parts. Aircraft instrumentation painted with radium-226 for illumination purposes was apparently conveyed to the smelter with other metallic debris. Slag, a waste product of the smelting operation, contained small, randomly located fragments of low-level radioactive material and elevated concentrations of lead, copper, and other metals. The slag was transported approximately 500 yards from the smelter and disposed of at the intertidal zone and bluff adjoining the shoreline of San Diego Bay.

Previous removal action activities commenced in June 1995 with a walkover survey that indicated slag wastes disposed of at the Shoreline Slag Area emitted low levels of radioactivity that exceeded background levels (Bechtel, 1995; NAS North Island SCE, 1995). Because of the proximity of the intertidal zone behind Building 380 and San Diego Bay, an Emergency Removal Action (ERA) was performed in the Shoreline Slag Area from July through December 1995 (ATG, 1996). The removal action addressed two 20- by 40-foot slag deposits in the ERA area. The excavated slag and beach sand were ultimately disposed of as combined waste (hazardous and radioactive) and were transported to a fully licensed and permitted facility in Clive, Utah, for land treatment and disposal.

Slag remains in the area even after the ERA performed in 1995. This slag was characterized during the subsequent extended remedial investigation/RCRA field investigation (RI/RFI) (ERI) (ORNL, 1999) and a supplemental field investigation (OHM, 1999). Therefore, a project has been established to minimize the human health effects of the remaining slag.

Phase I project description:

- Site preparation including marking and/or temporary relocation of utilities and establishing dust and erosion control measures
- Clearing and grubbing and removal of existing riprap.
- Grading of slope and excavation of material in preparation for rock revetment.
- Construction of a rock revetment along the shoreline bluff both southwest and northeast of Pier E. The revetment will be underlain by a geomembrane liner and a layer of buffer sand at least two feet thick between the liner and the rock.
- Construction of soil cover containment system for slag materials present on top of shoreline bluff between the rock revetment and Moffett Road. The cover will have a minimum thickness of 2 feet.
- Site restoration including construction of an asphalt concrete jogging path and concrete access ramp for Pier E.

Phase II project description (if needed):

- Placement of additional soil directly upon that placed during Phase I to create appropriate profile thickness as to absorb and hold moisture in the cover layer until it is disposed of via solar evaporation and plant transpiration.
- To be initiated after demolition of Building 380 is complete.

BENEFITS

- Protection of human health from low-level radiation and toxic metals
- Reduction of the potential contamination of groundwater and the San Diego Bay by toxic metals
- Reduction of mobility, toxicity, and/or volume of the slag
- Short-term and long-term effectiveness
- Ease of implementation which leads to a cost effective program
- State and community acceptance

ACCOMPLISHMENTS/CURRENT STATUS

Date	Activity
DEC 1995	Emergency Removal Action (ERA) Completed
DEC 2001	Engineering Evaluation / Cost Analysis (EE/CA) Completed

FUTURE PLAN OF ACTION & MILESTONES

Date	Activity
TBD	Commence Phase I

BIBLIOGRAPHY

- Site 10 NELP Facts, Section 1
- Site 10 Executive Summary

POINTS OF CONTACT

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UPDATED: 03/01/02